DEXIA MEIGEN, 1826 (INSECTA, DIPTERA): PROPOSED DESIGNATION OF MUSCA RUSTICA FABRICIUS, 1775, AS TYPE SPECIES. Z.N.(S.)2252

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The purpose of this application is to ask the Commission to set aside a designation of a type species for Dexia Meigen, 1826 (Tachinidae) that became binding as the result of an early Opinion, and to designate another type species in its stead.

2. In 1922 the Commission gave a ruling in its Opinion 71 (ICZN, 1922) on the nomenclatural status of species names cited in association with generic names in Westwood’s ‘Synopsis of the genera of British insects’ published in 1840. In the light of Westwood’s own statement (p. 1 of the ‘Synopsis’, footnote) that the cited species were ‘typical species’, the Commission determined that such species are to be accepted as the type species of those genera for which there were no prior valid type fixations. The genus Dexia Meigen, 1826 originally proposed with 24 included species (Meigen, 1826), is one such genus. No type species designation for it exists in the literature that antedates the work of Westwood (1840). The type species of Dexia, by the operation of Opinion 71, is therefore Musca volvulus Fabricius, 1794, by designation of Westwood.

3. Westwood (1840), in common with nearly all later authors, recognised the composite nature of Meigen’s concept of Dexia and adopted narrower genera for the originally included species. He used Dexia in a more restricted sense than Meigen and cited it (p. 139) as ‘Dexia Latr.’. Though not explicitly stated, this mode of citation can only have referred to Latreille (1829), his entry for Dexia in volume 5 of the second edition of Cuvier’s ‘Le règne animal . . .’, published three years after Meigen’s original description of the genus. However, the attribution of subsequent instead of original authorship does not invalidate Westwood’s type designation for Dexia (Code Article 67(f)).

Westwood noted that volvulus ‘belongs to the s.g. Phyllomyia R.D.’ a monotypic taxon (correctly Phyllomyia) proposed by Robineau-Desvoidy (1830, p. 213) for volvulus. Under today’s nomenclature Westwood’s subgenus Phyllomyia would be Dexia sensu stricto (the nominotypical subgenus) but use of the same name for the nominotypical subgenus and for the genus was not established practice in Westwood’s time. His action means nomenclaturally that Dexia Meigen is a senior objective synonym of Phyllomyia (both genera based on volvulus).

*Dr. Mesnil died on 17 May 1986 while this application was in press.
4. Another restricted constituent of the old Dexia was defined by Westwood (p. 140) and named by him ‘Dexilla Westw.’ It was stated to contain three species, but only one — the typical species in the sense of Westwood’s work — was named, viz. Musca rustica Fabricius, 1775 (cited as ‘D. rustica Meig.’). Hence rustica Fabricius is type species of Dexilla Westwood by original designation and also by monotypy. (Westwood noted, p. 140, by using a bracket-linked entry of the names, that his taxon Dexilla was equivalent to ‘Dexia Mcq. nec Latr.’: evidently a reference to Macquart, (1835, p. 211), but this is not nomenclaturally relevant.)

5. Westwood’s ‘Synopsis’ was overlooked by nearly all 19th century British and continental European dipterists, and the name Dexilla Westwood has even been omitted from each major British work this century that should have accounted for it, e.g. the revisionary handbooks on British Tachinidae by Wainwright (1928) and Emden (1954) and the checklist of British insects by Kloet & Hincks (1945). No 19th century author adopted Westwood’s classification, i.e. that with Dexia (syn. Phyllomya) based on volvulus and Dexilla based on rustica; instead they either (Zetterstedt 1844, 1849, 1855; Walker 1849, 1853) placed rustica and volvulus congenerically in Dexia, or (Rondani 1862; Schiner 1862; Brauer & Bergenstamm, 1889) placed rustica in Dexia and volvulus in Melanota Rondani, 1853 (replacement name for Melanota Meigen, 1838, preoccupied). So far as we know, Schiner’s (1862, p. 558) citation of Dexilla (as a synonym of Dexia) is the only subsequent mention of this name in 19th century literature. Walker knew Westwood but nevertheless neglected to mention Westwood’s Dexilla in his works on British Diptera, though he referred (Walker 1853, p. 94) to ‘Dexia et Dinera, Westw.’ in synonymy with Dexia.

6. Rondani (1856, p. 84) designated Musca carinifrons Fallén, 1816, an originally included species in Dexia Meigen, and this is the earliest type designation for Dexia if Westwood’s is rejected. However, acceptance of Rondani’s designation would cause nomenclatural havoc, irrespective of whether he identified carinifrons correctly, because this name (by virtue of its senior synonymy over Dinera grisea Robineau-Desvoidy, 1830) is the valid name of the type species of Dinera Robineau-Desvoidy, 1830. This genus is now universally accepted as distinct from Dexia (e.g. see Herting 1984, p. 140).

7. Brauer & Bergenstamm (1889) cited only rustica Fabricius as included in Dexia, but this action constitutes mention of an ‘example’ species in the meaning of Opinion 98 (1928) on the Brauer & Bergenstamm works; their action is therefore ineligible for consideration as a type species designation.

8. The influential catalogue by Bezzi (1907) of the Palaeartic TACHINIDAE did not cite type species as such but it established a definitive usage by which — in accordance with the precedents set by Rondani in a later work (1862, pp. 73–74), and by Schiner, Brauer & Bergenstamm, and others — the name Dexia was used for the genus containing rustica. Phyllomya Robineau-Desvoidy was correctly restituted as the valid senior
synonym over *Melania* and *Melanota* for the genus containing *volvulus*. *Dexilla* was listed by Bezzi (1907, p. 445) as a synonym of *Dexia*.

9. Coquillett (1910) dealing with type species formally for dipterous genera occurring in North America, cited *rustica* as type of *Dexia* Meigen by designation of Westwood, 1840; *Dexilla* was therefore listed by Coquillett as a junior objective synonym of *Dexia*. The Bezzi classification, supported by Coquillett’s designation, became firmly entrenched and universally used in the Palaearctic literature and continues so today. It is used, for example, in the new catalogue of Palaearctic *TACHINIDAE* by Herting (1984). The present application seeks to validate this nomenclatural treatment by Commission action.

10. Townsend (1916, p. 10) noted Coquillett’s ‘misconstruction’ of Westwood, pointed out that *Dexia* as used by Brauer & Bergenstamm (i.e. for *rustica*) should be *Dexilla* Westwood, and (p. 6) cited *volvulus* Fabricius as type species of *Dexia*. The appearance of Opinion 71 in 1922 effectively validated Townsend’s nomenclatural standpoint, not Coquillett’s, and in his grand opus ‘Manual of Myiology’ Townsend (1936a, p. 120; 1936b, p. 12; 1938, p. 276; 1939, p. 21) held fast to the correct nomenclature, basing *Dexia* Meigen on *volvulus* by designation of Westwood, 1840, and *Dexilla* on *rustica* by monotypy (using also a suprageneric nomenclature so based). In this he has since been almost wholly ignored. Post-Townsend only Sabrosky & Arnaud (1965) have considered *volvulus* to be type-species of *Dexia*, with *Phyllomya* R. D. as its synonym, though in doing so they recognised that their action—though nomenclaturally impeccable—was out of step with prevailing practice and commented (p. 1022) to this effect.

11. We concur with Townsend’s view that Coquillett misconstrued Westwood’s action. Westwood, in a work planned as a compendium of genera and stated intentionally to be a likeness to Latreille’s (1810) ‘Considérations générales... tableau méthodique de leurs genres’...etc., characterised as separate genera *Dexia* and *Dexilla*, naming *volvulus* as the typical species of the former and *rustica* of the latter. Why would he diagnose *Dexilla* as a genus distinct from *Dexia* if he intended *rustica* to be type of *Dexia*? Coquillett’s assertion that Westwood designated *rustica* both as type of *Dexia* and of *Dexilla* is untenable and Townsend rightly rejected it.

12. We consider that, interpreting Westwood’s action and the effect of Opinion 71, there is no doubt that *volvulus* Fabricius is the type species of *Dexia* Meigen. However, as in taxonomic practice the genus *Dexia* Meigen is based by specialists on *rustica*, not *volvulus*, and the difference affects correlated family-group nomenclature, it is highly desirable for prevailing usage to be ratified by Commission action. This will ensure a uniform and stable nomenclature for the genera concerned and their associated family-group nomenclature. Currently concerned specialists have all adopted *Dexia* in the usage sense based on *rustica*, and each has noted (in publication) the need for Commission action to authorise this. Crosskey (1973, p. 41) gave a general comment on the situation, and he (Crosskey 1976, p. 177; 1977, p. 601; 1980, p. 831), Mesnil (1980, p. 39) and Herting (1984, p. 143) have all
marked their citations for Dexia type with a statement that suspension of I.C.Z.N. rules is required. This application is to achieve that suspension.

13. In the light of the foregoing statement, the Commission is asked:
(1) to use its plenary powers to set aside all designations of type species hitherto made for the nominal genus Dexia Meigen, 1826, and to designate Musca rustica Fabricius, 1775, as the type species of that genus;
(2) to place the following names on the Official List of Generic Names in Zoology:
(a) Dexia Meigen, 1826 (gender: feminine), type species by designation under the plenary powers in (1) above, Musca rustica Fabricius, 1775;
(b) Phyllomya Robineau-Desvoidy, 1830 (gender: feminine), type species by monotypy, Musca volvulus Fabricius, 1794;
(3) to place the following names on the Official List of Specific Names in Zoology:
(a) rustica Fabricius, 1775, as published in the binomen Musca rustica (specific name of the type species of Dexia Meigen, 1826);
(b) volvulus Fabricius, 1794, as published in the binomen Musca volvulus (specific name of the type species of Phyllomya Robineau-Desvoidy, 1830);
(4) to place on the Official Index of Rejected and Invalid Names in Zoology:
(a) Dexilla Westwood, 1840 (gender: feminine), type species Musca rustica Fabricius, 1775 (a junior objective synonym of Dexia Meigen, 1826, through the action under the plenary powers in (1) above).

REFERENCES


